EDITED BY JO BURZYNSKA

RISONANZE DI VINO



EXPLORING THE SENSORY TERROIR OF RURAL ITALY

Interferenze

new arts festival



TERRITORI ASCOLTI TECNO·CULTURE N. 04

Editor

Jo Burzynska

Graphic Design

Giuliano Mozzillo

Cover Design

Amarildo Shelna

Texts

Leandro Pisano Jo Burzynska Gaetano Carboni

Proofreading

Malcolm Riddoch

Photos

pp. VIII Giuliano Mozzillo

02 / 04 Leandro Pisano

07 / 31 Daniela D'Arelli

37 / 43 Leandro Pisano

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32 Risonanze di Vino:
Tuning Wine with Sound
through the Senses
and Culture

Jo Burzynska

Jo Burzynska



Jo Burzynska is a sound artist, wine writer, and curator whose work in these areas has increasingly converged in the production of multisensory art. In combining her specialisations of audition, and taste and olfaction, her installations and performances are regularly created at the intersection of the senses. This has also seen her establish the world's first "oenosthetic" wine and sound bar at The Auricle Sonic Arts Gallery in New Zealand.

Her two-decade practice in sonic art spans experimental music performance and recording, to public and gallery installations and sound art curation. Her creative works have been presented internationally, including at MAXXI, Rome; Institute for Art and Olfaction, Los Angeles; Milieux Institute, Montréal; Studio Sienko, London; May Space, Sydney and Adam Art Gallery, Wellington, NZ. She is also an international wine judge, wine writer and editor, chairing at leading wine competitions, contributing to specialist magazines and authoring the book, *Wine Class* (Random House).

Jo's work and research regularly involves collaboration with scientists investigating sensory interaction in the fields of psychology, cognitive neuroscience, and sensory science. The *Risonanze di Vino* project forms part of her doctoral research at the University of New South Wales, Sydney that explores sensory and aesthetic correspondences between sound and taste.

Gaetano Carboni



Leandro Pisano



Gaetano Carboni has a PhD in Environmental Law and Economics. In 2007 he founded Pollinaria, an organic farm and research organisation in rural Abruzzo, which promotes innovative and integrated work in the fields of art and science, agriculture and the environment, cultivating cultural dynamism and the formation of a new rural archetype in the region and elsewhere.

In 2014, in collaboration with Futurefarmers, Ilaria Gadenz, Tiziano Bonini and Radio Papesse, he founded Radio Instabile, a rural radio project aimed at connecting and amplifying the voices of the agricultural world. Since 2016, he has been the president of the Consorzio Produttori Solina d'Abruzzo, a study and protection body dedicated to Solina wheat, other ancient grains, and agricultural biodiversity.

Leandro Pisano is a curator, writer, and independent researcher who is interested in the intersections between art, sound, and technoculture. The specific area of his research deals with the political ecology of rural, marginal, and remote territories.

Leandro is the founder and director of Interferenze new arts festival (2003) and is frequently involved in projects involving electronic and sound art, such as Mediaterrae Vol.1 (2007), Barsento Mediascape (2013), and Liminaria (2014-18). The sonic art exhibitions he has curated include "Otros sonidos, otros paisajes" (MACRO Museum - Rome, Italy, 2017) and "Alteridades de lo invisible" (Festival Tsonami, Valparaíso, Chile, 2018). He has conducted presentations, conferences and workshops in various universities, and events related to new media aesthetics, design, sound, and territorial regeneration processes worldwide.

He has written articles in magazines, such as Corriere della Sera – La Lettura, Blow-Up, Doppiozero, Neural, Exibart, and Nero Magazine and is author of the book "Nuove geografie del suono. Spazi e territori nell'epoca postdigitale", published in Milan by Meltemi (2017). He holds a PhD in Cultural and Post-Colonial Studies from the University of Naples "L'Orientale" and is presently Honorary Research Fellow in Intercultural Relations with the United States at the University of Urbino "Carlo Bo".





Many wonderful people have provided their time and expertise to make this project a reality. I would firstly like to express my immense gratitude to Leandro Pisano. He both curated and organised the Risonanze di Vino residency, proposed this book and was instrumental in its creation, and has supported my work over the years through this and the earlier Interferenze residency. I want to thank Gaetano Carboni and Hela Bonaci for hosting me at Pollinaria and providing such an ideal and welcoming place in which to develop my practice. I am indebted to Nicola Carfora for his great efforts behind the scenes during the Risonanze di Vino residency and providing the Cristina Park Hotel as the venue for its final event. Daniela d'Arielli has made the sound and wine I worked with come alive visually through her stunning photographs documenting the Pollinaria project. Giuliano Mozzillo has blended these images with the text in the beautiful design of this book. Malcolm Riddoch worked to a tight deadline to bring his proofreading skills to the project. I am also grateful to all the winegrowers who generously shared their thoughts and wines with me. Finally, I acknowledge that the creative research I conducted in these projects was supported through an Australian Government Research Training Program Scholarship.

— Jo Burzynska

Leandro Pisano

LISTENING TO THE COEXISTENCES

01 — Through reporting a number of cross-modal associations such as pitch and visual size, colours and tastes or brightness and the frequency of vibrotactile stimuli, some researchers have shown that these associations might originate in feedback connections from a point of convergence of the two sensory pathways. Also, it has been shown that there are implicit associations between tastes and particular pitches: in particular, on the one hand, sweet and sour tastes are associated with highpitched notes, on the other, umami and bitter tastes are preferentially matched to low-pitched notes, cf. Spence 2017.

02 - Blumenthal 2009.

In recent years, linking sound and food is becoming a key research topic not only in the psychology and science of perception,⁰¹ but also in contemporary and new media art studies. The latest research is focusing not only on the key factors of hearing related to multisensory perception of food, but also on some specific expressions that are rising from a performance-oriented aesthetics research, analysed through a multidisciplinary perspective.

Every recipe, as a list of operations to be executed over an interval of time, could be considered as a contemporary full score, which is at the same time well-defined and unpredictable in its sonic development. The sound and the taste of food can allow us to journey around the world by putting us in touch with different cultural traditions, localising us in a precise context, and by mixing cultural elements it can allow us to cover distances. If Heston Blumenthal once said that food is especially evocative in conjuring memories, ⁰² we could extend the meaning of his words by saying: food and sound.

As a significant project operating in the field bounded by sound art, technoculture and aesthetics research on food, Interferenze – an art research platform based in rural Southern Italy – was founded originally as a new media art festival in 2003. From the festival form, Interferenze evolved over the years through experimenting with a series of hybrid formats: residencies, laboratories, workshops, research field projects. This finally resulted in a research platform

dealing with the concept of (neo-) rural, and based on different multidisciplinary and critical approaches inspired by new media studies and cultural and postcolonial studies.

Interferenze started specific research on food through developing different residency projects with sound and new media artists, focusing on the food and wine of the local regions, Irpinia and Sannio, a tradition of high quality standards presented in an international context. The aim was to propose a path that, through projects based on evidence, creative intelligence, and sensory experience, could be designed to promote and foster a virtuous cycle where the quality of production and the consumption of food is inextricably linked to sustainability, environmental quality, and social relations.

In this way, different artists explored these areas through sound practice, connecting with local communities, farmers, food and wine producers, and working with products such as Caciocavallo and Pecorino cheese; Aglianico, Fiano, and Greco wines; traditional local recipes, vegetables, and raw materials from the fields; experimental

performances with artisans, foodmakers and chefs; and organising sonic dinners or multisensory workshops.

Jo Burzynska is among the artists invited to participate in the artist in residence programme on food and sound developed by Interferenze. She has visited the Irpinia and Sannio regions twice: in June 2012, when she joined the FARM/Interferenze festival in the area of the sulphur mines and Greco di Tufo vineyards, and more recently, in October 2018, when she was involved in a specific residency called Risonanze di Vino focused on the wines of the Valle Caudina and Mount Taburno subregions.

Both times, Jo was invited to visit some of the high quality wineries and vineyards in the selected areas. There, she recorded the sounds of fermentation and soundscapes of cellars and vineyards, which were ultimately used in the creation of sound compositions. These were finally presented to the local communities during multisensory events that encouraged experimentation with local wines through tasting and listening practices.



The Risonanze di Vino experience aimed to explore the 'hidden' multisensory connections during wine tasting, making it clear that it presents specific aspects of meaning in relation to sound. At the same time, this project was based on the idea that one can amplify the heritage of landscapes and flavours of a production area such as the Valle Caudina and Taburno, according to an approach that links tradition and technology, millennial stories and new cultural and productive scenarios.

The listening process activated in the work developed by Jo Burzynska deals with two main levels of inquiry: on the one hand, her studies on perceptual correspondences between elements of the sounds recorded and the salient characters of the wines "offers a sensory transfer of the complex cultural and personal context of the wine's making, heightened by the works' crossmodal harmony", as she stated. On the other hand, her attention to the affective and cultural connections among wines, territory, grape growers, landscape and local communities that emerge in the site-specific soundscapes created around one wine from each producer visited, lead the listener to a complex and powerful experience related to different layers of time, space and imagination. These compositions invite us to become immersed in a sonic world where all sparse traces are signals of expectation and memory.

In studying the characteristics of local wines through uncovering "resonances between the sensory and affective connections of local winegrowers [...] and their wines and land", the artist approached this context with the idea that sound, as a productive means to investigate material processes, can lead us not only to a deep sensory and cultural experience of the place through a sonic narration, but also to critically relate with the complex dynamics of the territory itself: the issues of "generation" and "time" within local communities (movement and cultural heritage); the peculiar geophysical characteristics of

the place; the relation between local context and global changes generated by the multidimensional challenges associated with the Anthropocene (climate, lithosphere, biosphere and the planet's chemistry).

In this sense, exploring the wines sonically, overcomes a mere descriptive approach to the territory, the landscape, and the local communities. Instead, a critical, two-way exchange is activated, in which local communities are called upon to tell their stories and the stories of

03 – Burzynska 2018.





their wine and territory together with the artist, thus co-threading a narrative that metaphorically turns wine itself into a sound archive of latent and preserved memories.

Through the listening experience, the wine landscape, the vineyards and cellars reveal themselves as spaces of resonance and dissonance, a complex assemblage of visible and invisible forces, of memories and technologies, of ecologies and tensions, introducing the stimulus of critically rethinking about material processes of contemporary agriculture, landscape, and Capitalist economy.

If "the Anthropocene is primarily a sensorial phenomenon: the experience of living in an increasingly diminished and toxic world" and "the way we have come to understand the Anthropocene has frequently been framed through modes of the visual, that is, through data visualization, satellite imagery, climate models, and other legacies of the 'whole earth'", 04 the multisensory work developed by Jo Burzynska in the local context of a small rural region of Southern Italy demonstrates how sound can be a powerful device to reveal what is unperceivable and invisible to our gaze, traversing places, telling stories, interrogating how we pass through and inhabit spaces and geographies in the here and now. As a powerful vector of knowledge and the rebalancing of the sensory hierarchy, it reveals the fragmentation and precariousness of that which we deem real, providing different soundings and approaches to the experience of what surrounds us.

04 — Davis and Turpin 2015, 3.

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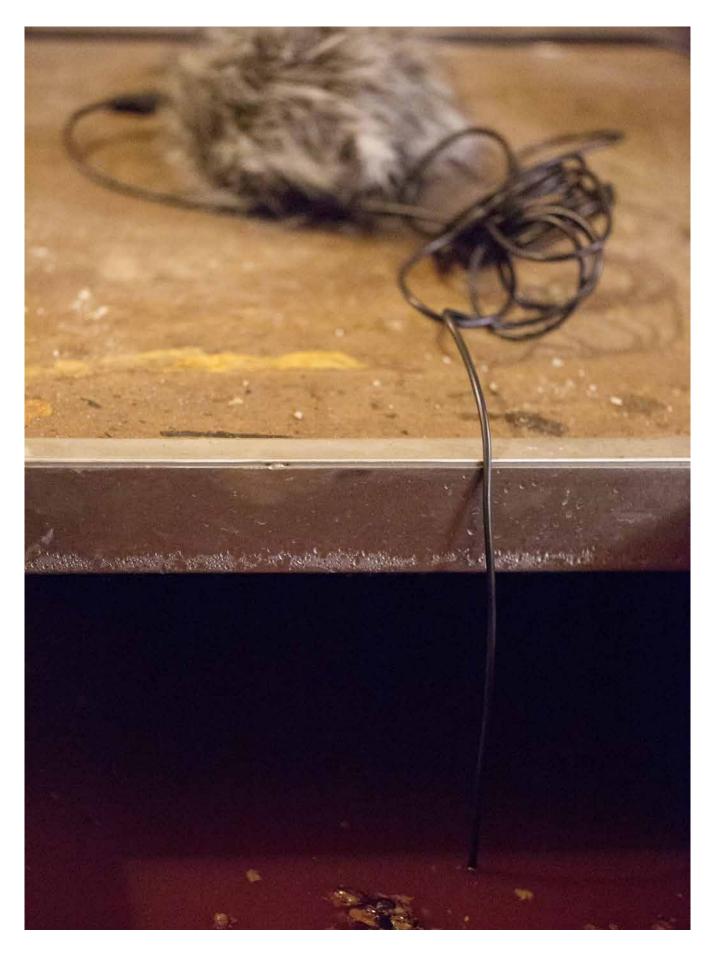
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Jo Burzynska

EXPLORATIONS IN SENSORY TERROIR

I am sitting in a vineyard. Around me the delicate flutter of vine foliage lifts out the creamy green notes of leaf and grass. Aeolian trellis wires thrum, transmitting the rhythms of the vine canes that entwine me with rich aromas of spicy earth below. These mingle with the heady sweet-sour fermentation scents that rise from the fallen grapes – black fruited, savoury and slightly sulphurous – which in turn blend with the buzzing drone of winged insects. Tasting a fresh grape from the vine sends a gentle sweetness followed by a thrill of sharp acid across my palate, a vivid blueberry character drawing my attention upwards to the bright chirp of birds. Softer birdsong merges with the subtle vanilla-honeysuckle of the ruchetta violacea flowers, while the sporadic guttural call of a crow summons smells of woody decay from the ground. A distant bass stutter of a tractor draws closer, accompanied by a murmur then clamour of the voices of the vintage crew, and wood transforms to musk. The vineyard sensescape builds and intensifies, fusing the distant and near, ethereal and chthonic, nature and culture, here through my senses, in my body, at this place.

Pollinaria N 42°23′23′′ / E 13°54′45′′ 16 October 2018



Wine offers a particularly rich multisensory experience. It starts with the pop of a cork or the crack of a cap and glugs out of the bottle, sometimes with a crackling fizz. Initial observation situates it within a spectrum of colours. Multiple aromas rise from the glass, which mingle with tastes when sipped that form flavours potentially so intricate they're almost impossible to articulate. In its passage across the palate, wine's tactility is felt through its weight and texture. However, sensory resonances reverberate well beyond the liquid that passes the lips. These are channelled by the current disposition and diverse experiences of the drinker. Before this, they were shaped by the complex cultural, commercial, and personal interactions between a wine and its makers, who are also part of the unique combinations of its terroir: the geology, geography, climate, and grapes of the land itself.

I call this interlaced sensuous system, sensory terroir. This is a metaphor harvested from the concept of the symbiotic environmental and human factors that create the overall character of the wine from a specific place. It echoes the idea of the senses as a similarly complex synergistic system that interact to form a unified perceptual experience. And it is from this sensory terroir that the projects of my artist residencies, *Risonanze di Vino* in Campania and at *Pollinaria* in Abruzzo, have grown; using the sensory interactions perceived between wine and sound, oriented by immersions in cultural and personal sensory experience.

In the *Risonanze di Vino* and *Pollinaria* projects, the senses are used as the main instruments of inquiry to identify and tune resonances between this complex network of connections. Both started with a sensory exploration of the local winegrowing and making process during the 2018 vintage, focused on the senses of taste, smell, and hearing. These were predominantly my own senses at *Pollinaria* and also encompassed those of the winegrowers⁰¹ with which I engaged in the *Risonanze di Vino* project. I then drew sounds from these environments through making audio field recordings, and tasted the wines produced there. The aim was to ultimately create soundscapes that worked in harmony or conversation with the wines, informed by the land and culture that had produced them. Together, the wine and sounds form a creative perceptual *sensescape*, a concept I borrow from sensory anthropology: "the experience of the environment, and of the other persons and things which inhabit that environment [...] produced by the particular mode of distinguishing, valuing and combining the senses in the culture under study".⁹²



01 — I use the all-encompassing term winegrower, which relates to those who both grow the grapes and make them into wine (as is the case with many small wineries where the roles of winemaker and viticulturalist are often undertaken by the same person or people).

02 - Howes 2005, 143.



03 - Spence 2011.

04 — Burzynska 2018.

05 - Knöferle and Spence 2012, 1003.

06 — Burzynska, Wang, Spence & Bastian 2019.

07 - Serres 2008.

08 — From Serres 2008, 161-166. A crater is a bowl in which wine and water were mixed in the symposia of ancient Greece.

09 — Capatti and Montanari 2003.

10 - Howes 1991, 168.

11 - Howes and Classen 1991, 257.



correspondences⁰³ – the universal tendency of a sensory feature in one modality to be matched with one from another sensory modality – from scientific fields investigating perception and my own interdisciplinary research in this area.⁰⁴ This has highlighted that "neurologically normal individuals map tastes (and other aspects of flavor/oral-somatosensation) and both musical and nonmusical sounds in a nonrandom manner".⁰⁵ The complexity of wine appears to make it a particularly plentiful source of these correspondences,⁰⁶ especially when synchronized with similarly multilayered sonic accompaniments. In the sensescapes created through these projects, I use sound to modulate perceptions of the flavour in the wines and aromas of the winemaking process, drawing attention to and intensifying salient characters and shifting or destabilising perceptual focus. In harnessing these perceptual combinations, I also endeavoured to transmit symbolic, conceptual, emotional, and cultural meanings.

Ways of sensorial knowing and creating are explored in the *Risonanze di Vino* and *Pollinaria* projects. This is an approach that resonates with the corporeal philosophies of the cultural historian, Michel Serres in *The Five Senses.* ⁰⁷ Serres considers the senses as entwined and the locus of the production of experience. Using the complexities of wine as a powerful metaphor for the intermingling of the senses, Serres proposes wisdom is generated not through asensual distanced philosophical discussion, but in the stirring together of multiple sensory streams into many craters. ⁰⁸ This sensory blending is what I endeavoured to create through the residencies, in works that both engage in and encourage non-verbal multisensory dialogues.

ENGAGING WITH TASTES, SMELLS AND SOUNDS

With such a valued taste culture deeply rooted in a rich history of regional wine and cuisine, ⁰⁹ Italy is an environment particularly well suited to projects harnessing the aesthetic potential of the more widely undervalued sense of taste (and the closely connected sense of smell). This creative context is quite different from that of the Anglo-Celtic cultures (Britain, New Zealand

and Australia) in which I've made most of my art and research to date. While people in these nations have been making deeper connections with food and drink in recent years, especially more affluent members of society, the appreciation of taste is nowhere near as culturally entrenched as it is in Italy. Given increasing understandings that many of our sensory responses are shaped by personal and cultural experience, these differences in "sensory profiles" were something I needed to take into account when exploring sensory relationships I encountered. As noted by Howes and Classen, "1" "other cultures do not

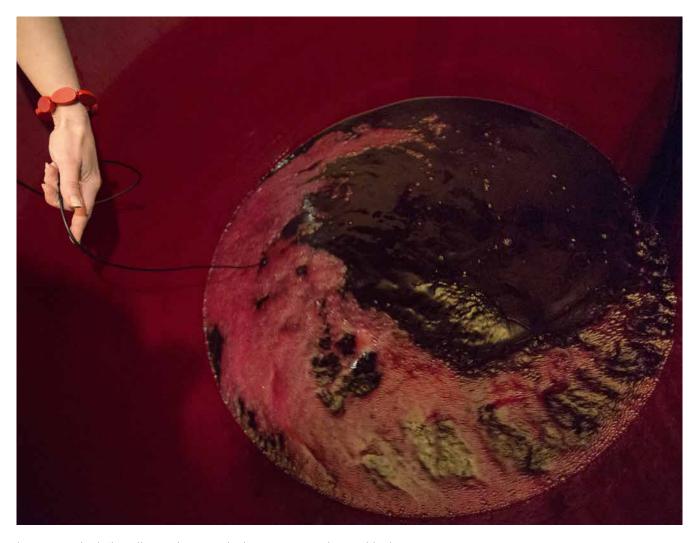
necessarily divide the sensorium as we do".

Hearing, and its active counterpart, listening, is the other main sensory focus of the residencies. Hearing may not be the sense that's most widely associated with wine in itself, but sound is very much part of the winemaking process. The harvest period is a time that's particularly sonorous, as the grapes are picked in the vineyard and processed in the winery. In these projects the listening process started with the land, from the soils, up through the vines to the grapes and the environments that dictate their flavours. It covered the wineries in which these grapes ferment to become wine and then bottled. The voices of the winegrowers and makers also reverberate through the projects, both as sounds themselves and in the winegrowers' philosophies and sensory accounts.

I incorporated touch to some extent, due to its inherent role in flavour, and – as I was to discover – its importance to some winegrowers' relationship with their land and grapes. In the sensecapes this is conveyed through the textural elements of the wines in the mouth; the translation of the tactile nature of the material encounters in the vineyards and wineries; and through the final artworks.

Despite the visually stunning landscapes in which these projects were conducted, I chose not to focus on the sense of sight. This reflects the nature of my personal artistic practice, which concentrates on combinations of the sonic, gustatory, and olfactory. It's also an approach that offers an alternative to the dominant ocularcentric nature of Western culture and its art that can blind us to the rich sensory experience in other domains.

As I was keen to explore the multiple connections within the sensory terroir encountered in the projects, most of the wineries I worked with were organic, or at least following a more natural path in their grape growing and winemaking. Use of synthetic chemicals works against nature rather than with it, breaking connections within wine's ecosystems, and distancing humans from the land. Those who choose to work organically are forced to have a stronger connection with their vineyards, to sense their needs and deliver the more involved care these require. In the winery, minimal



human manipulation allows wine to make its own connections, with elements such as the local yeasts, rather than being directed and reshaped by chemical additions. The tread of winemakers working in this way may sound more gently, but the flavours of their wines consequently sing all the louder of the place from where they came. I suspected that their sensory engagement might be greater than those working chemically, and consequently produce deeper resonances for me to tune into.

Wine has been described as bottled geography. It has also been evoked as bottled poetry. Wine, as I endeavour to demonstrate in these projects, in combination with sound, is also a robust vessel for explorations of sensory terroir. As noted by Serres, "The bottle contains the entirety of the sensible, all at once; contains bottomless common sense".12

12 - Serres 2008, 182.

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TIME AND THE BELLS

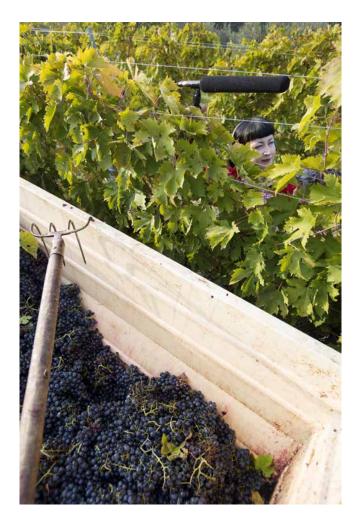
A few years ago, the skeleton of a marten was the only apparent sign of life marking the entrance of the ancient Amorotti winery in Loreto Aprutino, Italy, where twenty five years of stillness have followed centuries of agricultural practices and rituals. A slow evolution in the winemaking process that defined the passing of time in this obscure, cryptic labyrinth of half revealed chambers, where life had previously taken the form of unicellular organisms and micrometrical species gently intertwining into the shells of the wooden barrels. A frozen underground microcosm where silence was constantly broken by the toll of bells resonating from the tower of San Pietro – the medieval abbey crowning the village – that have always sonically inhabited this space, until the last generation of the Amorotti family has stepped into that skeleton and the modern days of the winery have begun.

Amorotti is a venerable Italian family farm, whose early origin dates back to 1521. It hosts a vast wildlife and forest reserve, where pastures and woodland coexist with cultivated land that's home to vines, olives, cereals, legumes and a wide diversity of further genetic resources all belonging to the agricultural heritage of the region of Abruzzo. In the middle of the Renaissance era, the progenitor of the family was exiled from Mantova by Marquise Isabella d'Este

Gonzaga, governor of the state and patron of Leonardo
Da Vinci. Later in the sixteenth century, his descendants
established a new barony in Abruzzo that flourished as
one of the most magnificent farms in central Italy over the
centuries that followed. From another branch of this family
tree, a further agricultural epic arose when in the 1900s,
Raffaele Baldini Palladini and his daughter Maria founded a
pioneering olive oil mill in Loreto Aprutino. This produced
"extra fine" olive oil that was awarded with gold medals and
the highest distinctions at the most prestigious exhibitions
of the time, conquering markets around the globe and
reaching as far as the court of the Tsar of Russia.
Maria Baldini Palladini and Baron Luigi Amorotti married in
Loreto in 1912, joining the two stories and branches of a
family tree.

These narratives and biological patterns form the roots of Pollinaria, a research organisation operating since the early twenty-first century as an overarching project comprising all the activities of the farm and fostering innovative, integrated work in art, agriculture, and ecology.

The themes of rural regeneration, environmental sustainability and the future of agriculture and food inspire an ongoing artist residency project which aims to intersect the vision of international thinkers with the memories of



the land, life forms inhabiting the fields and the ideas and dreams of the local communities. These collaborative endeavours raise cultural momentum and the slow sedimentation of a new seed, a rural archetype acting as a driver for a design of cohesion between human life and the environment.

The plan of the present is the framework where this new seed is being planted. It germinates in the dark, quiet shadows of the past, to gather an awareness of the record of nature; it freely and chaotically permeates a space of critical investigation, growing towards the openness of times yet to come. The role and responsibility of rural culture with regard to natural resources is challenged through a process of exploration and co-production of knowledge, where agriculture, art and activism, along with different identities converge. Farmers, artists, scientists are all seed keepers for this seed; they are all propagators of it, being involved with a universal broadcast that begins from a farmyard.

The quest for such a synthesis comes from the thought that the origin of the current ecological crisis resides in the deep fracture between our species and the natural world, in the separation between the scientific and humanistic cultures and behaviours, brought by a primordial anthropocentrism. Long before the sound of the bells started to reach the Amorotti winery, almost suggesting the possibility of an alternative path, a time of supremacy of the human over nature had started, a time when nature was envisioned as being in the service of humanity and capable of bringing only an illusory understanding, an evanescent one, mediated by the senses and therefore incompatible with the real rational knowledge. 01 In another time, the truth and necessity of a dominant relationship between the human and other species had been written and professed. ⁰² And in another, more recent time the bells couldn't prevent the rules of modern science from resonating into the minds of scholars. Rules pervaded by a utilitarian ethics against terrestrial resources and directed towards a dystopian transformation of scientific knowledge into power over nature. ON Now, it is the time of the Anthropocene, when the need for recomposing the scission between nature and the human mind represents the point of cohesion between new ecological awareness and an ancient dignity in the sphere of humanism. The time for a redesigned syntax of the relationship of interdependence between all living species, where nature is progressively absorbed in any process of perception and imagination of reality.04

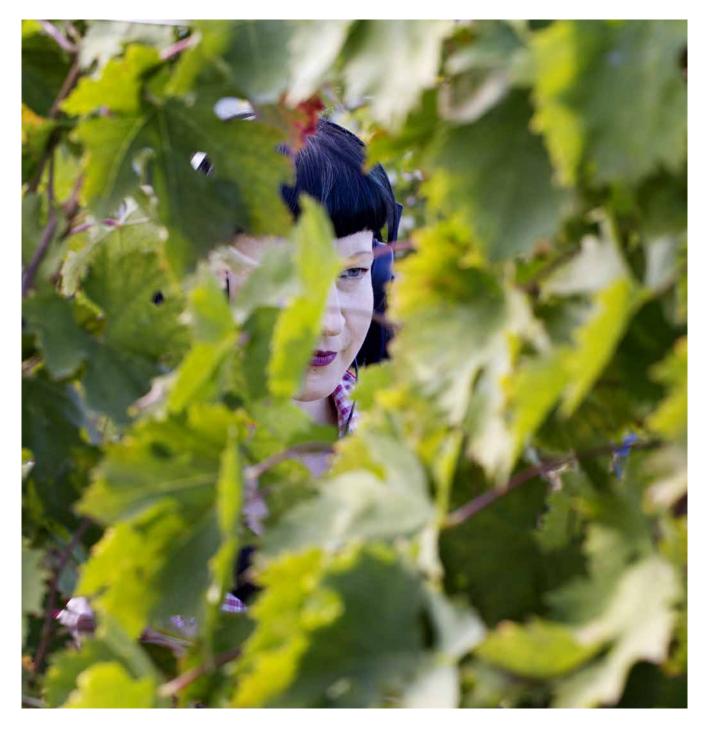
Art is a building block of this process, a fundamental one, and sound art is at the forefront of any method of enquiry pursuing the identification of hidden languages and formulas for interaction buried in the cracks of the natural world. The centrality of the experience of the senses created the foundation for a deepened process of exchange in Jo Burzynska's life and work at Pollinaria. Focused on the biological transmissions from the vine and the organisms interacting with it on many levels, the artist's "oenosonic immersion" also

01 — Hargrove 1989.

02 - White 1967.

03 - Bacon 2004.

04 - Clark et al. 2004.



involved a variety of phases of the winemaking process within the Amorotti winery. Humans, like ants or even much more microscopic entities, were a natural and integral part of this sonic exploration, in a compelling union of the sensory and cognitive orbits, corporeal and evanescent elements, time and space. One day the microphones entered into the barrels, and the bells of San Pietro seemed to resonate differently in the winery, through this suggesting a cultural shift, the elevation into a symbiotic, biocentric dimension.



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POLLINARIA: RECONNECTION THROUGH OENOSONIC IMMERSION



"We return yet again to mixture and to the concept of variety, both immediate in the rich, complex, vibrant experience of the senses and, unparadoxically, more abstract than the simple, inverse operations of analysis"

— Michel Serres 01 01 — Serres 2008, 167.

It is easy to take leave of our senses. Especially when our minds become highly absorbed in our work. Regular exposure can create numbing patterns of habituation, even within sense-focused pursuits. As a sonic artist and wine critic, I am not immune. In striving to make objective judgments about sensory impressions, touch can be lost with important subjective responses, or sensorially limiting habits can develop when engaging with the materials and methods of one's work. Practical techniques start to direct experience, and analysis dulls the senses. To fully perceive the sensory interactions central to my creative crossmodal practice, a "rich, complex, vibrant experience of the senses" is essential. Consequently, a sensory reconnection can be required.

This is what the residency at Pollinaria, in the winegrowing region of Abruzzo, offered: the opportunity to explore my own sensory terroir through connecting my senses with the wine terroir I experienced amongst Pollinaria's fruit laden vines and fermenting wines. While I was engulfed in the 'familiar' of the winegrowing process, it was placed in a new context at Pollinaria, through an exploratory open-ended sensory project undertaken within an artist residency. I undertook an "oenosonic" immersion; an intensive personal sensory engagement with the sounds, smells, and tastes of the winemaking process. Through this I endeavoured to make deeper connections with my own senses through Pollinaria's environments and between the different sensory stimuli I encountered within these. As an organic farm and arts research programme with its own vineyards and winery, Pollinaria was ideal for exploring such relations. The vivid embodied sensory knowing⁰² that it enabled, helped me refine methodologies for making sensory connections. From these connections I would ultimately go on to create 'sensescapes' 03 that use and transmit the synergies discovered.

NATURE OF THE STUDY

My oenosonic immersion started with a contemplative inquiry through the senses with which I was working. As noted by the secular mindfulness academic, Jon Kabat-Zinn, lack of presence in the moment through distractions results in impoverished sensory experience. To quieten the mind and promote sensory receptivity, my engagement in the vineyard, winery, and wine, largely began with a meditative practice of sensory awareness that I have been developing and increasingly integrating into my creative multisensory work.

02 — This concept of bodily knowing draws on the phenomenological theories of Maurice Merleau-Ponty (Merleau-Ponty 1962), supported by current understandings of embodied cognition within cognitive science in dialogue with ancient Buddhist meditative practices (Varela, Thompson, and Rosch 2016).

03 — As noted in the previous chapter, Explorations in Sensory Terroir, I borrow the term "sensescape" from sensory anthropology (Howes 2005, 143) to describe the multisensory fusion of the soundscapes, aromascapes and tastescapes of my work.

04 - Kabat-Zinn 2005, 118.

This contemplative practice is based on traditional Buddhist meditation and secular mindfulness, informed by the composer Pauline Oliveros' creatively framed "Deep Listening", which encourages expanded consciousness through intensive meditative listening. ⁰⁵ Increased recognition of the value of such embodied approaches is evident in the current shift in sound studies, through ideas such as the corporeal epistemologies proposed by Holger Schulze in *The Sonic Persona*. Schulze suggests that these offer the potential, even within



an ostensibly single-sense reflective practice such as Deep Listening, to open up perception within the whole sensorium. Such corporeal epistemologies "exercise and expand polysensory perception beyond the limits of culturally habitualized sensory practices". Of In actively extending my contemplative enquiry across multiple modalities, I endeavour to explore such possibilities through this mode of "deep sensing".

Closing my eyes to remove the visual stimuli that can easily dominate and distract, I register but do not follow any thoughts that occur, while resting gentle attention on sensations arising through just one, or a combination of my senses. More directed sensory encounters follow, focusing on elements of interest that arose during the initial meditation. As well as permitting a more thorough

engagement with the environment, this concentration helps refine the senses and overcome the habits and value judgments that can limit sensory connections.

Listening: "The practice is intended to expand consciousness to the whole space/time continuum of sound/silences. Deep Listening is a process that extends the listener to this continuum as well as to focus instantaneously on a single sound (engagement to targeted detail) or sequences of sound/silence [...] The practice of Deep Listening is intended to facilitate creativity in art and life through this form of meditation. Creativity means the formation of new patterns" (Oliveros 2005, xxiv-xxv).

05 - Oliveros describes Deep

This meditative process is followed by reflection on the phenomenological experience, which is sometimes documented. At Pollinaria, I made notes that were used, along with ongoing attention, to make sensory mappings of the perceptual features I had noted in the vineyard, winery, and wines (extracts of which are presented in the relevant sections that follow). Combined, these observations went on to direct some of the field recording, which will be used in the ultimate crossmodal sensescapes generated from the residency at a later point in time.

06 — Schulze 2018, 140. Schulze additionally notes: "The corporeal-sensory apparatus of researchers is trained and refined here like in any other research practice operating with measuring instruments or with reproduction technology. The material percept is at the same time medium and access to research for corporeal epistemologies. Dispositives of logocentrism are mutated, reorganized, and reassigned a new and differing position."

TOPOLOGIES OF SOUND

In my work as a wine writer, I have spent two decades of my life *immersed* in wine. In my travels through many of the world's major wine producing regions, I have spent literally thousands of hours in vineyards and wineries. Visiting the actual places from which the wines I taste and write about originate has always provided an important context for my own understanding of them and how this can be conveyed to my readers. In most of these visits, time spent in

the vineyards and wineries is dominated by discussions with the winemaker or viticulturist. While these provide great insights into their winegrowing philosophies, our voices can literally drown out the wider sonic terroir and submerge sensuous perception with the weight of the conceptual.

In contrast, at Pollinaria, my approach to sound started with "Being with hearing in the stillness of open attending". Of I felt that this more open listening offered greater possibilities for hearing something new, listening in a productive alternative way and perceiving as yet undiscovered multisensory connections. In the dynamic soundscape that unfolded within its vineyards in the Abruzzo

countryside, I become attuned to the intersecting layers of plant, animal and human noises. Even when using microphones to extend my earshot, I attempt to remain in this contemplative space. These permit me to listen in to the harmonics and rhythms of the vine training wires. They also extend my hearing underground, where at one point they pick up fast crumbling sounds overlaid with regular squeaks. As this is like nothing I had heard before, I allow my reflective process to proceed to further investigation. This revealed the high sounds were the stridulation of ants, as they rubbed their mandibles on their abdomens, an action that is fittingly part of their own multimodal communication.⁰⁸

At times the vineyard becomes full of human voices, with the arrival of the vintage crew. While meditative practice is harder to accomplish amongst a busy harvesting activity that I have to capture within a limited timeframe, I endeavour to follow the contemplative approach as much as possible in my listening. The fact that I understand very little Italian helps anchor me in the sensory realm as I attend to the cadence of the workers' speech, interspersed with the snipping of secateurs, rather than following the meaning of their conversations.

Mechanical sound drift from aeroplanes, cars and farming machinery is also a feature of the vineyard soundscape. I had observed a tendency both in myself and others to make immediate negative judgments of such sounds in a rural context, given that they are widely regarded as not fitting conceptually or even aesthetically within ideals of what constitutes a 'natural' soundscape. Such affective categorisation during this initial stage of listening I have also noted can both distort listening and remove the listener from the present moment. 99 Avoiding such evaluations proves the most challenging aspect of my contemplative open listening, but later emerged as important when it came to exploring sensory connections.

07 — Kabat-Zinn 2005, 203.



08 - Hölldobler 1999.

09 — In Schafer's conservative notion of the soundscape (Schafer 1993), mechanical sounds are largely viewed as unwanted, which I suggest colours listening and can tune listeners out of the complexities of the interactions between people, place and technology. As noted by Timothy Morton, this kind of Romantic aestheticisation of nature can actually serve to create a disconnection with ecology (Morton 2007).

CHARACTER/SOURCE	PERCEPTUAL DESCRIPTION (TIMBRE / PITCH)	LEVEL (INTENSITY) / DURATION / SPATIALITY
Insects (bees/wasps)	Low pitched buzzing	Loud, at multiple intervals, near (loud) and distant (volume diminishes as insect moves away)
Leaves	Fluttering (gentle impact of pliable surfaces against each other)	Quiet, sporadic bursts (background)
Birds	High bright cheeping and softer melodious birdsong; coarse lower cawing; midrange cock crow and squawks	Loud: regular repetitive cheeping, bursts of cawing, extended periods of song (foreground), occasional squawks and cock crow (distant)
Tractor	Regular bass whirring, high pitch long squeaks	High volume constant whirring (foreground), sporadic squeaks (background)
Ants underground	High squeaky rubbing, crunching from rapid friction between solid particles	Medium/regular rhythmic squeaking, very dynamic background of moving particles (foreground)

Vintage is a time when winegrowing is at its most sonically active; not only generated by human labour, but also creatures from grape-hungry birds down to microbes. Moving into the winery, at a time where nothing much can appear to be happening, close listening draws attention to the subtle hiss of the wines fermenting. Directed listening with an ear at the opening of the barrels and tanks, or using a hydrophone dropped into the must, reveals a raucous fizzing and crackling from the carbon dioxide released as the yeast population converts the grapes' sugar into alcohol. Twice daily the winemakers slurp the fermenting black grape must out of its fermenting vessels and splashily pump it back over its skins. When the yeasts become silent, this signals the juice has likely now become wine. This wine is then taken to a barrel press, out of which liquid slowly trickles into a deeply resonant vat.

Moving mindfully around the 15th Century Pollinaria winery, built into the hillside of the town of Loreto-Aprutino, I notice the varied resonances of different rooms. This vaulted brick space contains a partially subterranean cellar on one side, and an open higher storey on the other, with more reverberant passageways and an opening in one ceiling from which the cooing of pigeons descends. Bells ring from a nearby church, adding a cultural resonance. I reflected that within this enclosed space, apart from the occasional interjection of the mechanised pump and press, and the odd reverberation from outside, the sounds of the traditional

winemaking embraced at Pollinaria's winery differs little from when wines were made here hundreds of years ago.

Sound map of the Pollinaria winery (extract)

CHARACTER/SOURCE	PERCEPTUAL DESCRIPTION (TIMBRE / PITCH)	LEVEL (INTENSITY) / DURATION / SPATIALITY
Wine fermenting (cerasuolo)	High pitched sharp glass-like oscillations of bubbles bursting over a medium pitched hiss	High volume (through hydrophone), constant (foreground)
Wine pumped	High to medium pitch, swirling, bubbling, fairly rough timbre, phasing effect	High volume (through hydrophone), constant, becomes higher pitched and less full sounding over time (and quieter)
General winery ambiance	Low pitched hum and rumbling, quiet hiss, occasional water drip, filtered sound of pigeon coos/birds from above, distant church bells	Low to medium volume, shifting sounds (mid- and background)
Grape skins removed from tank	Deep low pitched reverberant metallic sound, running liquid, soft squishy sound, sharp clacks	High volume, percussive steel elements and clacks, bursts of liquid (foreground); squishy sound (midground)
Grape press	Medium pitch deeper "thick" sound of liquid running into reverberant container	Medium volume, constant (midground)

THE OLFACTORY CLIMATE

"Scents and fragrances ... invite us to surrender entirely to the present, basking in the fragrance and the fragrances of now", noted Kabat-Zinn¹⁰ of reception through what is arguably our most immediate sense, that of smell. In the vineyard, my meditative immersion discloses subtle green notes from the undervine grass and vine leaves, and a delicate peppery vanilla scent wafting from the ruchetta violacea flowers that dot the rows. Earthy and woody aromas rise from the ground, heightened after rain. Fresh berry fruit scents of grapes on the vine mingle with pungent winey fruit decaying beneath. In the winery, this heavy fusion of fresh fruit and sulphurous fermentation aromas are also a dominant olfactory feature, along with undertones of wet stone.

10 — Kabat-Zinn 2005, 227.

As smell is the only sense that connects directly with the limbic system, which deals with instinctive behaviour rather than conscious thought, the olfactory engagement of my oenosonic immersion proved the easiest to contemplatively experience. However, it was the hardest to communicate given smells are so poorly coded in many languages, including English. However, where language might fail, I hope the sense-focused works that I make will succeed in conveying some of the rich complexity of that experience.

11 - Majid et al. 2018.

Smell map of the Pollinaria vineyard (extract)

CHARACTER / SOURCE	PERCEPTUAL DESCRIPTION	LEVEL (INTENSITY) / SPATIALITY
Grapes (on and under vine)	Ripe bright fresh blueberry, fermenting note with hint of rotted hay, musky	Medium intensity fresh and fermenting fruit note (foreground), rotting musky note (background)
Leaves	Grassy, "green", creamy	Medium intensity green notes (foreground), creamy (background)
Flowers	High florals: vanillin, jasmine and honeysuckle-like (white florals)	Medium intensity, delicate (background)
Soil	Deep: damp earth with sweet aromatic spicy undertone	Medium intensity (midground)
Vines/wood	Woody, slightly "shed-like"	Low (midground)

TASTING THE EARTH

In *The Five Senses,* Michel Serres writes of the speaking "golden mouth" of discourse and the silent "second mouth" that actually tastes, proposing a "third mouth" that transcends both in its "sapience and sagacity". ¹² I wondered whether I could access this third mouth through the approaches of my oenosonic immersion in developing a kind of literal tasting that used an attentive approach honed by my years of professional wine assessment, but in which the conceptual didn't talk over sensory understandings. I considered this third mouth would be the orifice through which deeper multisensory connections with wine could potentially be perceived.

12 - Serres 2008.

Attempting to find an approach to wine tasting that took advantage of my own expertise and incorporated contemplative practice, proved to be one of the

greatest challenges in my engagement with sensory terroir. Given fMRI scans have revealed that wine experts appear to respond to tasting wine with quicker analysis but more targeted sensory reactions than non-experts, 13 I was unsure whether my expertise would be a help or a hindrance in this endeavour. In my 'expert' approach, the major experiential focus of attention on the sensory features of the wine could appear comparable with a mindful approach. However, as I have always taught and practiced, the development and application of wine tasting expertise also requires these discrete sensations not just to be registered, but also identified and linked to relevant wine attributes. 14 Professional tasting techniques¹⁵ require these sensory characters to be classified, their levels rated and an overall 'detached' judgment made on the wine's quality (and sometimes provenance and age) using learnt benchmarks. 16 This fusion of the sensory and the cognitive appears to enhance the ability to discern the multiple elements present in the complex liquid that is wine. In contrast, as noted by Barry Smith in his exploration of the complicated nature of tasting wine, 17 inexperienced wine tasters are less able to make such nuanced differentiations and more concerned with basic and instant hedonic judgments of like and dislike. When I'm drinking wine for enjoyment, I like to think I can stray from the more cerebral path and become lost in the sensuous. However, if this is not done mindfully, other sense-suppressing distractions can creep back into the space left by analysis.

For my tasting of Pollinaria's main red Montepulciano d'Abruzzo wine, I endeavoured to find a middle way. I moved from mediating my experience through the mental creation of a traditional tasting note, to something that more closely reflected the raw perceptual experience of a wine. What follows are notes made using two different approaches to the tasting experience, and then a mapping that draws on both. The first is a more formal note written during the tasting of the wine. The second is a recollection of a *deep sensing* contemplative engagement when I stepped back from analysis. Very likely due to my background, this proved the hardest sensory task of all and remains a technique in progress.

Pollinaria Montepulciano d'Abruzzo 2016 (tasting note)

Opaque and deep crimson in the glass. On the nose the wine exhibits notes of dark fruit – boysenberries and black plums – with a hint of spice. The palate is medium-to-full bodied, with ripe and concentrated boysenberry, black plum, and blackberry fruit. These are joined by hints of cocoa and woody spice, with a perfumed floral thread reminiscent of violet. Its rich and ripe characters are framed by a fresh elegant acidity and dense powdery tannins. The finish is dark fruited and spicy. A balanced and well-structured serious Montepulciano demonstrating good regional typicity.

13 - Pazart et al. 2014.

14 - Burzynska 2009, 11.

15 — Such tasting techniques include the method that I learnt at the start of my career and have subsequently taught, the Wine and Spirit Education Trust's Systematic Approach to Tasting®.

16 — As a wine writer, I also attend to my affective and aesthetic responses, which I employ to add colour to my wine descriptions.

17 – Smith 2018.

Pollinaria Montepulciano d'Abruzzo 2016 (deep sensing description)

I look: Deep crimson.

I inhale: Dark fruits, subtle spice.

I taste and feel: Rich deep undulations of blue and black fruits. A weightiness anchored in a dense velvety grip moves up to a lifted juiciness, which combine in suspension in a space in between. Bitter cocoa; perfumed violet; and woody spice rise and fuse.

I swallow: sustained dark fruit and spice with a long taper.

Taste map of the Montepulciano d'Abruzzo 2016

CHARACTER / SOURCE	PERCEPTUAL DESCRIPTION	INTENSITY
Fruit	Rich, ripe, boysenberry, black plum and blackberry	High, persistent
Acidity	Bright, fresh	High, persistent
Tannins	Dense, powdery	Medium-high, building
Aromatics (palate)	cocoa, violet florals, woody spice	Medium
Aromatics (nose)	dark fruit: boysenberries and black plums, spice	Medium fruit, low spice

MAPPING THE (MULTI)SENSORY TERROIR

The final stage of my sensory inquiry at Pollinaria was to attend to the way the sensory stimuli I encountered interacted in the vineyard and winery environments, and also to explore further connections that could be made using different sensory mappings. For example - as expressed in the passage at the start of "Explorations in Sensory Terroir" - in the vineyard, I noticed how the interplay between different sounds and smells possessed a dynamic dimension. Listening to the low rough scratching of the vine branches on the trellising system drew my attention down to the spicy notes of the earth below. When attending to the subtle vanilla-honeysuckle aromas of the ruchetta violacea flowers, sensory synergies direct my attention upwards and sideways to the gentle birdsong emanating from the trees at the edge of the vineyard. Changes in dominant sounds, such as from birdsong to an approaching tractor, also shifted the focus of the smells, from woody notes and the rough timbre of crows to more musky notes as the bass-heavy mechanical volumes rose. When switching back to classifying and judging the sensory inputs in the environment, I noticed it was far harder, if not impossible to perceive these fluid connections.

These simultaneous sensory connections in situ culminated in the *oenosonic* mappings that I then went on to make. As illustrated by the Oenosonic map of wine flavours with winery sounds, these sought to highlight potential correspondences across different sensory and geographical domains using characters that could be conceived as being perceptually similar. Along with emotional, conceptual and aesthetic elements that unfold on subsequent reflection, these mappings will go on to be used as guides in the creation of the final wine-focused multisensory sensescapes produced from the residency.

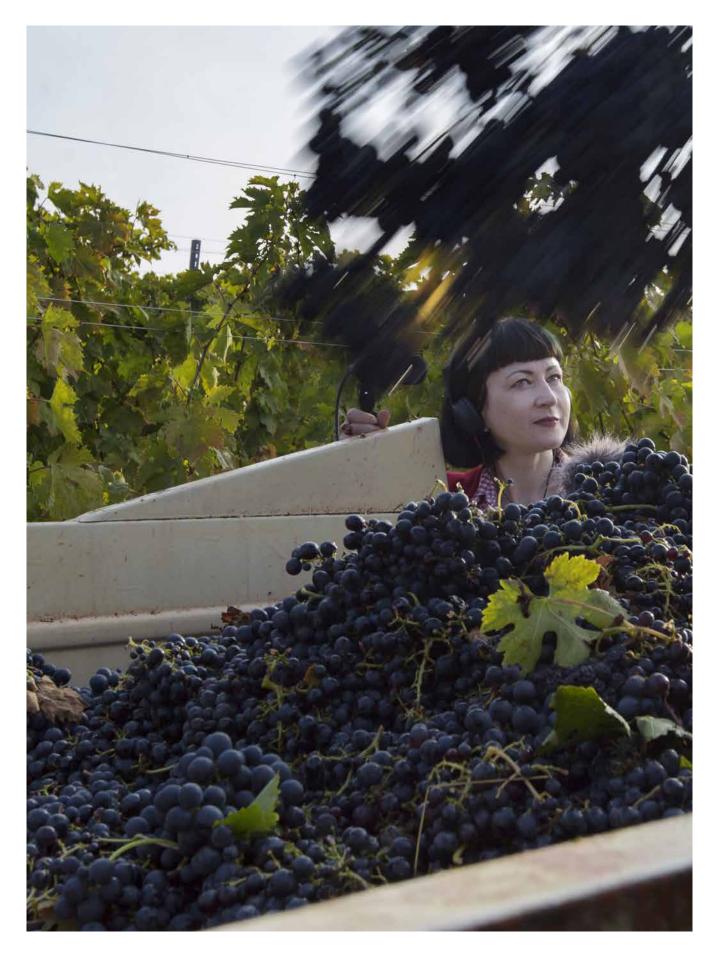
Oenosonic map of wine flavours with winery sounds (extract)

WINE CHARACTER	WINE PERCEPTUAL DESCRIPTION	SOUND CHARACTER	SOUND PERCEPTUAL DESCRIPTION	INTENSITY/ BALANCE IN FINAL MIX
Fruit	Rich, ripe boysenberry, black plum and blackberry	Grape press	Medium pitch deeper "thick" sound of liquid running into reverberant container	High (foreground)
Acidity	Bright, fresh	Wine fermenting (rose)	High pitched sharp glass- like oscillations over medium pitched hiss	Medium level (mid-ground)
Tannins	Dense, powdery	Winery ambiance (large vaulted room) / Grapes skins removed from tank	Deep resonant drone, low rumbling / Deep low pitched reverberant metal sound	Medium level (background)

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Jo Burzynska

RISONANZE DI VINO: TUNING WINE WITH SOUND THROUGH THE SENSES AND CULTURE

01 — Trubek 2008, 62.

02 - Serres 2008, 184.

"Terroir, I think, is the notion that attempts to capture, in a sense, to bottle, this interaction between nature and culture for those involved in wine" Amy Trubek ⁰¹

"There is nothing in the senses which does not lead to culture" Michel Serres⁰²

"It's important for us to remember that the sound and the smells of the countryside we were used to when we were young were lost. When we started working with the vineyards here around 2000, these no longer existed," Cantina Giardino's Daniela De Gruttola explains. However, since starting the winery as a cultural project to preserve old vines and winegrowing traditions under threat from modern agricultural practices, biodiversity has increased and the sensescape has changed. "Now we have recovered these sounds and smells of the past," she states.

De Gruttola's sensitivity to sonic shifts in the agricultural soundscape, was just one of the sensory insights revealed in the research that grounded the creative *Risonanze di Vino* project. In this residency, predominantly located in Sannio/Valle Caudina areas in Campania, I used the senses as a medium and a method to explore the sensory, cultural and affective connections of six local winegrowers with their wines and land. From talking to and observing these winegrowers in their environments, many other connections emerged. These ranged from the audible reassurance provided by the regular whirr of

winemaking machinery, to the powerful embodied sensorial impulsion that had drawn some of the winegrowers to wine and the land away from their original career paths. I used these sensory cues to orient the exploratory crossmodal multisensory sensescapes I went on to produce, through which I sought to transmit the salient personal, cultural, and perceptual connections that I had discovered.

These winegrowers' responses, in combination with my own sensory experience within their wineries and vineyards, were central to my exploration of *sensory terroir* in *Risonanze di Vino*. *Sensory terroir* is a term I conceived to evoke the interconnected system of the senses and the features of an environment. Conventional definitions of terroir as it relates to wine – such as that provided in the Oxford Companion to Wine⁰³ – focus on the interactions between soil, topography, and climates, which combine to form a unique character consistently reflected in the wines from that site. In his treatise on *Slow Food*, Carlo Petrini uses the Italian term "territorio" (territory) to express a similar concept.⁰⁴ One of the most eloquent communicators on terroir, the wine writer Matt Kramer, expands this further, in suggesting that as a metaphor, terroir is "a way of being alert [and] of both acknowledging and accepting that the Earth – not just the soil – can speak".⁰⁵ This Earth is in dialogue with culture in Amy Trubek's anthropological interpretation of terroir, "in the form of a group's identity, traditions, and heritage in relation to a place".⁰⁶

Taking this a step further, I propose that within culture the sensing individual, with their personal histories, emotional and sensory interactions, must also be considered an essential component of terroir. "Wine is a product of man, not a product of nature," as De Gruttola asserts, countering the oft-repeated romantic terroir myth that wine magically makes itself in the vineyard. "It is natural for the vines to grow, but they react to your treatment [...] A *natural* wine would actually be vinegar!"

From this foundation on the convergence of natural, cultural, and personal production, my notion of sensory terroir is developed. This is then expanded to intersect with the intimate multisensory bodily perception experienced by a person within a specific place, calling to mind Paul Rodaway's notion of sensuous geographies, which use "the senses both as a relationship to a world and the senses as in themselves a kind of structuring space and definition of place". Or However, my investigations in sensory terroir are not primarily concerned with examining the sensory mediation of the geographical. Rather, it is a metaphorical tool grounded in concrete sensorial experience within an environment that I employ to draw out creative crossmodal connections.

Exploring crossmodal correspondences between wine and sound characters was a major focus of my first ever 'crossmodal' artwork, *Oenosthesia*, made during

03 - Robinson and Harding 2015.

04 - Petrini 2003, 7.

05 - Kramer 2017.

06 - Trubek 2008, 91.

07 - Rodaway 2002, 4

an earlier artist residency curated by Leandro Pisano also in Campania in 2012. In the intervening years, I have become increasingly aware of how our sensory responses are shaped by our experience and cultures. Therefore, on my return to the region, I looked to expand on the scope of my earlier work to create something that actively engaged with and potentially even translated elements of the personal and cultural experience behind the region's wines.

This approach was informed by ideas from sensory anthropology, which highlights how sensory hierarchies differ between cultures. 98 From my own anecdotal observations made from numerous trips across Italy, its strong history and value attached to a food and wine culture that spawned the Slow Food Movement, 09 it certainly appeared that the sense of taste in particular was privileged more highly than in my own Anglo-Australasian culture. I was unable to find any formal studies that compared actual sensory engagement between these cultures. However, as the use of senses in language can indicate the 'sensory model' of a culture¹⁰ and highlight different hierarchies,¹¹ I turned to a study using linguistic and cultural analysis of sensory descriptions of British and Italian tourism websites. 12 This found that the Italian descriptions regularly employed sensory imagery, with numerous references to aromas and flavours, the latter often linked to tradition. In contrast, the British prose was more factual, with the term 'taste' largely used in the sense of personal preference. However, the British descriptions did reference sounds more often, suggesting the possibility of a higher level of engagement with hearing. 13

Venturing into the vineyards and wineries, most of the producers I worked with in the *Risonanze di Vino* residency were located in the Sannio district. Here, from the slopes of Mount Taburno down to the Titerno River in the inner part of the Campania region, wine has been made since Roman times and vineyards currently cover 10,000 hectares of land. While wine is an important part of the area's cultural, social, and economic identity, it is not one of Italy's better-known wine regions as it strives to overcome past associations of producing quantity over quality. As I discovered from talking to the winegrowers, since World War II and increasingly in recent years, younger generations have been leaving rural Campania to find physically easier and more lucrative work in the cities.

Most Sannio producers are small, and with very few of their wines exported to my current base of Australia, my personal exposure to them has been minimal. Consequently, local wine and food critic, Antonio Medici and local wine educator, Lucia Cioffi, curated a selection of wineries for me to visit that represented the recent drive to quality terroir-focused wines. As I had requested, most of these were smaller organic operations, given this tends to lead to the kind of hands-on connection with wines and land that encourages greater sensory-emotional bonds.¹⁵

08 - Howes 1991.

09 — Slow Food founder, Carlo Petrini describes taste itself as a social sense, in it being "a pact of fellowship and a program of cultural integration" (Petrini 2003, 71).

10 – Howes and Classen 1991.

11 — Majid et al. 2018.

12 — Manca 2013.

13 — While I did not note heightened sonic engagement in most of the winegrowers I met, I did however come across the wonderful Campanian term, "pippiare", which fuses both sound and taste in describing the sound of the simmering of the local slow-cooked ragù at the point when the taste becomes just right.

14 — Riviezzo et al. 2017.

As these winegrowers were actively involved in making a product that is tasted (and smelled), I acknowledged that these senses might well be ranked more highly in the sensory models of these individuals than in the general population. However, as people working so closely with taste in a culture where this sense is so highly appreciated, I envisaged this potentially ultra-heightened sensory engagement would offer a powerful orientation in my relatively short time with each winery. This would direct me towards important personal and cultural sensory experiences that I could convey through the *oenosonic* sound and wine works I would go on to create. I had less idea of their relationships with sound, given questions over the ranking of hearing within Italian culture and as a more peripheral sense in winemaking.

Each winery visit began with an interview with the winegrower. ¹⁶ Using the framework of my definition of wine terroir, as including humans, I first sought to understand how the winegrower's interaction with nature shaped the character of the final wine and how this might be driven by personal, cultural, and historical factors. My investigations then moved into sensory terroir to discover how the winegrowers' senses of smell, taste, and hearing connected them to their general work in winemaking and specifically to their land. I also tasted their wines and noted the way they described their sensory characters.

Italian, and as a number of the winegrowers I interviewed spoke little English, I am indebted to my interpreters, Nicola Carfora and Leandro Pisano, for their assistance in interpreting for me in these instances.

16 — Given that I speak very little

As predicted, the winegrowers who were most directly involved with the physical *embodied* winegrowing process appeared more attuned to their senses; of touch, smell, and taste in particular. Questions relating to perceptions of sound were met by some initially quizzical looks, and in one case I even alerted the winery owner through my own listening to the fact that his wine had started fermenting. However, most were able to articulate to some extent how they engaged with sound in their work, besides the more obvious modalities of taste and smell connected with winemaking. It also appeared that the deeper the sensory engagement, the lighter the winegrower's touch on the natural environment with which they worked. In this way, deep sensing would appear to engender positive ecological outcomes.

These sensory observations, of varying depth and detail, were then employed to help guide the audio recordings I made in their vineyards and wineries. A cross-sensory *oenosonic* mapping for each winery was then made, through which I sought to capture additional perceptual resonances between the different wine and sound characters I encountered.

From all of these connections, I created an individual sensory terroir-specific sensescape around a wine from each winegrower. Each of these crossmodal wine and sound works aimed to reflect the connections articulated by the maker of the selected wine through sounds of that wine's sonic terroir, sourced from its place and production. These were also designed to harness perceptual

correspondences between aspects of the sounds recorded and the salient characters of the wine, which was tasted as part of the work. Combined, the blending of wine and sound offered a sensory transfer of the complex strands behind the wine's making, tuned by the their crossmodal harmonies.

FIELD STUDIES AND OENOSONIC SENSESCAPES

The six exploratory works created from the *Risonanze di Vino* residency were presented on its final day at an event at the Cristina Park Hotel, Montesarchio, 7th October 2018.

RESOLJE

Work details: Masseria Parisi Resolje Moscato Spumante NV and

Soundscape 5:29

Winegrower: Antonio Parisi of Masseria Parisi, Baselice Responses interpreted from the Italian by Nicola Carfora

Despite his parents warning against becoming involved in the unprofitable business of wine, Antonio Parisi abandoned university to return to run his small family wine company, Masseria Parisi with his cousin Paolo Parisi. His parents had already revived the old and now rare tradition of making passito from Moscato grapes grown on the cooler higher altitude slopes of Baselice; a wine style dating to pre-Roman times where grapes are dried to concentrate their sugar. Since taking over three years earlier, Antonio Parisi has built on his parents' legacy by further improving the quality of the winery's Zingarella passito, and started to make a sweet sparkling *spumante* wine from his Moscato. He has also converted the vineyards to organic, a practice closer to that of his great grandfather who started the family vinegrowing tradition through making wines for the local Barons.

Parisi takes me first to Masseria Parisi's vineyards. On high ground near the Campania-Puglia border, winds sough up the steep hillsides rustling the vine leaves and dense organic growth beneath. He speaks of the peace and meditative nature of winegrowing, which was one of the aspects that attracted him back to work his family's land. We then go to a quiet well-ventilated shed where newly harvested Moscato are just starting their process of drying to become passito. The area's dry winds are essential to this process, and today the muted sound of a gentle breeze drifts through the racks of grapes.

With its crisp, pure and light character, Masseria Parisi's Moscato spumante was best suited to the higher pitch and timbre of the recordings I made in the estate's elevated windy vineyards. From these I created a sympathetic soundscape for

this sparkling wine that cycles between and merges with the wind through the vineyards and the effervescence of Parisi's newest wine fermenting. I sought to capture the sense of peace that was so important to Parisi, but also a dynamic excitement propelled by the currents of fresh air.

MONTAGNA MIA

Work details: Masseria Frattasi SVG920 2017 and

Soundscape 3:31

Winegrower: Pasquale Clemente, Masseria Frattasi,

Montesarchio

"I love the mountain. I love making mountain wines,"
Masseria Frattasi's Pasquale Clemente enthuses. We're
almost 1000 metres up Mount Taburno with a storm
approaching. Before it breaks Clemente wants me
to literally feel the excitement he experiences in the



mountain's rocks. In a fast-paced tour of his high-altitude sites, Clemente picks up pieces of the limestone that cover these vineyards. Showing me the ancient marine life fossilised within the rock, he gets me to feel their rough crumbly surface.

This situated sensory experience of the vineyards is obviously crucial to him and the way he relates to his land and wines. He reveals that he told one potential overseas distributor that he would only sell them his wines if they first came to visit his vineyards. As well as interacting with his own plantings, he also takes me to experience some rough-barked 200-year-old vines, saved by their isolation from the phylloxera vine pest that destroyed much of Europe's vines from the late 1800s. He has taken cuttings from these from which he plans to establish a new vineyard and preserve the old vine heritage.

Both the wine I used and the soundscape I created hail from over 800 metres up Mount Taburno. The vineyards were dramatic, made even more so as rolling thunder increased in volume and rain began to crash down. The sound of the rain, captured close, battering the leaves on the vines, seemed well suited to the high acidity of Masseria Frattasi's high elevation SVG920 Sauvignon Blanc. The rocks also form part of the soundscape. I endeavour to translate their texture through the slightly rough timbre and high pitch created when I hit or scraped them together, which works in synergy with the minerality of the wine.

33/33/33

Work details: Vallisassoli 33/33/33 2013 and Soundscape 3:40 Winegrower: Paolo Clemente, Vallisassoli, San Martino Valle Caudina

Responses interpreted from the Italian by Leandro Pisano

At Vallisassoli Paolo Clemente is another of a new generation of winegrowers returning to the land. His interest in wine, which saw him spend time as a sommelier, led him back via his palate to his family's one-hectare vineyard. He has converted this to organic production and made it into a commercial venture. Given his background, taste is central to his experience and wine production. As he has only spent a couple of years involved with making wine, he tells me the other sense he relies on most is vision. This he describes as the 'most stable sense' that he considers currently gives him the confidence to check whether winemaking processes are going well. He feels intuition may play a larger part as his experience grows.



As well as walking me through his vineyard, Clemente takes me to Castello Pignatelli della Leonessa, where ancient maps of the area are stored, including the one he uses on his wine label. High up in the castle's walled garden overlooking the town of San Martino Valle Caudina, he shows me vines that could well be as much as 300 years old. Clemente wants to make wine from them, if he can persuade the Duke who resides in the castle.

Church bells recorded from within the 300-year old vineyard ringing up from San Martino bookend the soundscape.

Perceptually they have a bright tone, purity, and richness

to their sound that correspond with the flavours of Vallisassoli's sole wine, 33/33/33: an equal blend of Greco, Coda di Volpe and Fiano grapes. In between the chiming, crickets and insects sing in the living, organic Vallisassoli vineyard, their chorus complementing the freshness of the wine, as does the high pitch of the fermenting wine that's also part of this work. The bells both symbolise the old winegrowing tradition and herald the new, repeated in patterns that echo the numbers in the wine's name.

CHANGING FLOWS

Work details: Fontanavecchia Libero Taburno Falaghina 2007 and

Sounsdcape 2:33

Winegrower: Libero Rillo, Fontanavecchia, Torrecuso Responses interpreted from the Italian by Leandro Pisano

"My wine has flesh and bones, which are perfumed with my memories, the taste which covers one's tongue, and wakes up all of your senses, my wine is the blood of these fields and everything that I have in me," is the poetic quote attributed to Libero Rillo to convey his embodied connection with his family's

17 - Rillo 2018.

150-year old wine estate.¹⁷ For him wine won over the army, and beat more obvious paths leading from his Masters degree in economics, lured as he was by the land and the "amazing" people of the wine industry.

It is people that are now a major focus of Rillo's role as the manager of Fontanavecchia. As the largest winery I visited, it employs numerous staff to carry out specialised roles. These include expert consultants that help him deal with the challenges of climate change, which he considers part of a natural pattern. When I ask Rillo about the sensory engagement involved in his managerial role, he acknowledges the importance of engaging with all the senses. However, he admits that he does not use his hearing much, although he does use his smell to check barrels of wine. His main concern appears more with the winery's big picture rather than the smaller sensory details. This includes strong regional links that manifest in his strong commitment to local grape varieties. He shows me a rare example of an aged Falanghina made by Fontanavecchia, which I select as the wine I work with in my sensescape.

The perceptual characters of the wines and of the winemaking itself largely guided the Fontanavecchia sensescape. I was intrigued by the particularly resonant sounds of the bubbles of the fermentation heard through my hydrophone, which were like nothing I'd recorded before. I shaped these into a more rhythmic structure to reflect the fresh line of acidity in the white Falanghina wine, while its fullness and concentration is reinforced by the drone made from the winery's pumps.

IN GIARDINO

Work details: Cantina Giardino Bianco 2017 and Soundscape 4:18 Winegrower: Daniela di Gruttola, Cantina Giardino, Irpinia

Cantina Giardino was the one winery included in the *Risonanze di Vino* project located outside the Sannio area. I visited it on request as I was intrigued by their wines, which I had tried before, and their extremely natural approach to winegrowing and winemaking. Cantina Giardino manage their vineyards organically. This minimal intervention extends to the winery where their wines are made without temperature control and matured in large vats made of local wood, or amphorae, some of which they made themselves with clay from their own vineyards. Cantina Giardino have been buying vineyards containing old vines abandoned by those considering them unprofitable. "In this earthquake region, where we don't have old buildings, we think these old vines are our historic centre," observes De Gruttola, who trained in sociology before focusing on wine.

As well as noting the changes in the rural soundscape over the decades due to shifts in agricultural practices, De Gruttola tells me how you can hear the sound

of creatures in the soil when you don't use chemicals in the vineyards. Many of these benefit the vines, and even those that don't – as illustrated by the whine of mosquitoes she has noted in this wet season – she won't kill them as she considers them all part of the vineyard ecosystem. She takes me through her Chianziano vineyard in Paternopoli, burying her nose deep into the bunches of grapes to check for ripeness, with the smell of the vineyard guiding her instincts in how the wine is to be made in each vintage. She tastes the grapes as she passes through the vines, noting that the Coda di Volpe variety is ready when the seeds crunch.

I endeavoured to capture sounds of life in the soil, but just as Cantina Giardino stress the importance of time in the making of their wines, this required longer than my short period with them allowed. Above ground, mechanical sound drift from outside the vineyard seemed in sharp contrast to Cantina Giardino's lo-fi viticultural approach. At the time I chose to largely edit these from the final work, which used Cantina Giardino's richly textured Bianco, made in the old "ramato" style – using white grapes fermented with their skins – and matured in an amphora. I mirrored its rich layers sonically using deep notes from the heavy clay soil, and textures from the vine leaves and plant growth under the vine to complement its gentle pithy character. The fizzing ferment was used to underpin the wine's fresh grapefruit and balsamic-like acidity.

Postscript: In hindsight, applying the learnings gained from the Pollinaria residency that followed *Risonanze di Vino* chronologically, I now consider that I should have been less judgmental about the mechanical sounds. Including these in the final work would have been truer to my experience of the site. The soundscape might have been more challenging, but would have presented a valid dialogue between the realities of differing rural practices, while better reflecting De Gruttola's low intervention winegrowing philosophy.

SPARTIVIENTO

Work details: Cantine Tora "Spartiviento" Aglianico del Taburno Riserva DOCG

2011 and Soundscape 2:51

Winegrower: Giampiero Rillo, Cantine Tora, Torrecuso Responses interpreted from the Italian by Nicola Carfora

Cantine Tora's Giampiero Rillo tells me of the passion for wine that's been passed down through generations of his family. His aim is to make wines that demonstrate the typical expression of the local grapes using an "environmentally friendly" approach where chemical intervention is kept to a minimum.

He regards his sense of hearing as important for indicating how the mechanical equipment he uses is functioning. His ears also tell him what the wine fermenting

in the vats is doing. If he hears that it has become too vigorous, he is prompted to slow it. Conversely, if it sounds too weak, he intervenes to make it more active. In the vineyard too, the natural sounds provide signs that can guide his decisions. If he hears the buzz of bees he is happy, as this means the grapes are ripe and ready to be picked.

As I visited on a day when it was raining heavily, which can make recording outside a challenge, all the audio for the soundscape I created was captured from inside the winery. The sounds of the fermenting wine that Rillo is so attentive to were some of the most active I'd heard in the region, which worked with the powerful acidity of the local Aglianico grape of Cantine Tora's flagship wine. The rich and supple character of this red was also echoed in the rich smooth melodic quality of the drones created from the winery's coolant systems, and its full-body by the lower pitch.



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